

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) An optical power calibration method for calibrating a writing power of an optical storage carrier player, the optical storage carrier player comprising an access device for writing data onto an optical storage carrier, the optical power calibration method comprising steps of:

setting a first power calibration area located outside a center of the storage carrier;

setting a data storage area located outside the first power calibration area;

setting a last possible lead-out area located outside the data storage area and at the outermost edge of the storage carrier for storing ending information about data written on the optical storage carrier;

setting a second power calibration area located within the last possible lead-out area, wherein the starting point of the last possible lead-out area and the starting point of the second power calibration area are disposed in a predetermined length to form a reserved area for storing ending information about data written on the optical storage area;

providing data to be written in the data storage area;

before writing the data in the data storage area, determining a writing condition of the data in the data storage area;

determining whether the determined writing condition in the data storage area is within a predetermined condition or not, and according to the determining result to select one of the first power calibration area and the second power calibration area to perform an optical power calibration process to determine a calibrated writing power; and

controlling the access device to write the data in the data storage area with the calibrated writing power and writing the ending information in the reserved area.

2. (Currently Amended) The optical power calibration method of claim 1~~claim 7~~, wherein the data storage area is divided into an inner area and an outer area, the writing condition is the writing location of the data, and the predetermined condition is to

determine if the writing location of the data is located within the inner area, when the writing location is located within the inner area, performing the optical power calibration process in the first power calibration area, and when the writing location is located in the outer area, performing the optical power calibration process in the second power calibration area.

3. (Currently Amended) The optical power calibration method of claim 1~~claim 7~~, wherein the carrier player controls rotation of the optical storage carrier in a constant linear velocity (CLV) manner.

4. (Currently Amended) The optical power calibration method of claim 1~~claim 7~~, wherein the carrier player controls rotation of the optical storage carrier in a constant angular velocity (CAV) manner.

5. (Currently Amended) The optical power calibration method of claim 1~~claim 7~~, wherein the data storage area comprises two data segments, and the carrier player controls rotation of the optical storage carrier in a constant linear velocity (CLV) manner when the access device writing data onto one data segment, and each data segment having a different linear velocity.

6.-7. (Cancelled)

8. (Currently Amended) The optical power calibration method of claim 1~~claim 7~~, wherein the writing condition comprises a writing location of the data in the data storage area, and the predetermined condition comprises a predetermined portion of the data storage area.